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REMARKS/ARGUMENTS

This application contains claims 1-14 as originally filed.

Section 2 of the Detailed Action rejects claims 1-14 under 35 U.S.C. 102(e) as allegedly being anticipated by Greszczuk et al. US 2002/0150152 A1 (Greszczuk below). This rejection is respectfully traversed, for at least the reasons given below. It is noted that the disclosure of Greszczuk et al. US 6,445,730 B1, also cited but not applied, is substantially the same, and the same comments apply thereto.

In particular, Section 2 of the Detailed Action contends with respect to claims 1, 4, and 9 that Greszczuk discloses "changing an inversion state of successive synchronization frames to notify the receiver of a bit allocation change (see col. 2, paragraph [0022-0023 and col. 3, paragraph 0025-0027]". This contention is not correct.

The present specification contains in its background a full discussion of relevant prior art, which includes inversion of a synchronization symbol, see for example page 5, line 18 and the subsequent discussion. Greszczuk is not more relevant to the present invention as claimed than the already acknowledged prior art.

More particularly, paragraphs [0022] to [0027] of Greszczuk describe features of a DSL (multicarrier modulation communications) system including a bit allocation table and a frame counter, there being a synchronizing frame every 69 frames. These paragraphs do not discuss notification for bit allocation changes or inversion of synchronization frames.

Greszczuk discloses in paragraphs [0032] and [0046] that notification of an intent to enter a sleep mode may comprise "an inverted sync signal". This is similar to the prior art acknowledged in the present specification as referred to above, in which a notification can comprise "an inverted synchronization symbol". Disadvantages of this acknowledged prior art are discussed in the present specification for example at page 6, lines 14-32.

The present invention as claimed in claims 1, 4, and 9 differs from this prior art. In the prior art, one synchronization frame (also called a synchronization symbol or signal) is inverted to provide a notification. In the invention as claimed, an inversion state of successive synchronization frames is changed.

Thus in the prior art, synchronization frames have a given normal polarity, one and only one synchronization frame is inverted to provide the notification, and subsequent synchronization frames have the given normal polarity again. In accordance with the invention as claimed, synchronization frames have a first polarity, a notification is provided by changing this polarity for all subsequent synchronization frames so that all of these successive synchronization frames have a second polarity which is opposite to the first polarity (i.e. the inversion state is changed

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for successive synchronization frames), and this continues until a subsequent notification of another bit allocation change, in which the inversion state of the synchronization frames is again changed, after which all of the successive synchronization frames again have the first polarity, and so on.

This difference and its substantial advantages are described fully in the present specification at page 15, line 15 to page 17, line 11.

Greszczuk and the acknowledged prior art do not disclose or suggest "changing an inversion state of successive synchronization frames" as recited in claim 1. Greszczuk only discloses inverting a single sync signal, not successive synchronization frames or signals. Claims 4 and 9 are more specific in this respect, each of them reciting "changing an inversion state of the synchronization symbols, from non-inverted to inverted or from inverted to non-inverted". Again, this is not disclosed or suggested by Greszczuk or by the acknowledged prior art.

Accordingly, claims 1, 4, and 9 clearly and patentably distinguish the invention from the prior art, and are properly allowable. The other claims 2-3, 5-8, and 10-14 are allowable with claims 1, 4, and 9 for at least the same reasons, and it is believed to be unnecessary to discuss these claims here.

It is therefore respectfully submitted that all of claims 1-14 are properly allowable over the applied reference. The Applicant therefore respectfully requests that a timely Notice of Allowance be issued in this application.

In view of the forgoing, early favorable consideration of this application is earnestly solicited.

Respectfully submitted,

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